Moblin Overview and Collaboration Summit Report about Moblin

moblin.org / MIRACLE LINUX CORPORATION

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http://moblin.org, http://moblin.jp

About me

- Mitsutaka Amano
- Joined to moblin.org about 1 year ago.
  - A maintainer of Moblin Image Creator from June 5th of 2008.
  - Technical support and discussion on Moblin ML.
- I work for MIRACLE LINUX CORPORATION.
  - Develop and Support the Linux OS for Intel(R) Atom(TM) Processor board.
  - Also for the ThinClient OS.

Agenda

- Moblin Overview
- Pickups from LFCS
  - librest, mojito(Integrate web service)
  - Connection Manager(connman)
  - Clutter(3D User Interface API)
  - Moblin SDK(MIC2, Projgen)
- In the future...
- Articles in Japan

Moblin Overview

What is moblin.org?

- The Open Source Software what is promoting a mobile linux platform.
- moblin.org is focused on Mobile Internet Device(MID), Netbook, In-Vehicle Infortainment(IVI) and embedded board.

History of Moblin

- Jul 2007: Opened moblin.org.
- Jul 2007: Started to development Moblin v1(based on deb).
- Aug 2008: Started to development Moblin v2(based on RPM).
  - 01/24/2009: Moblin v2 Alpha1
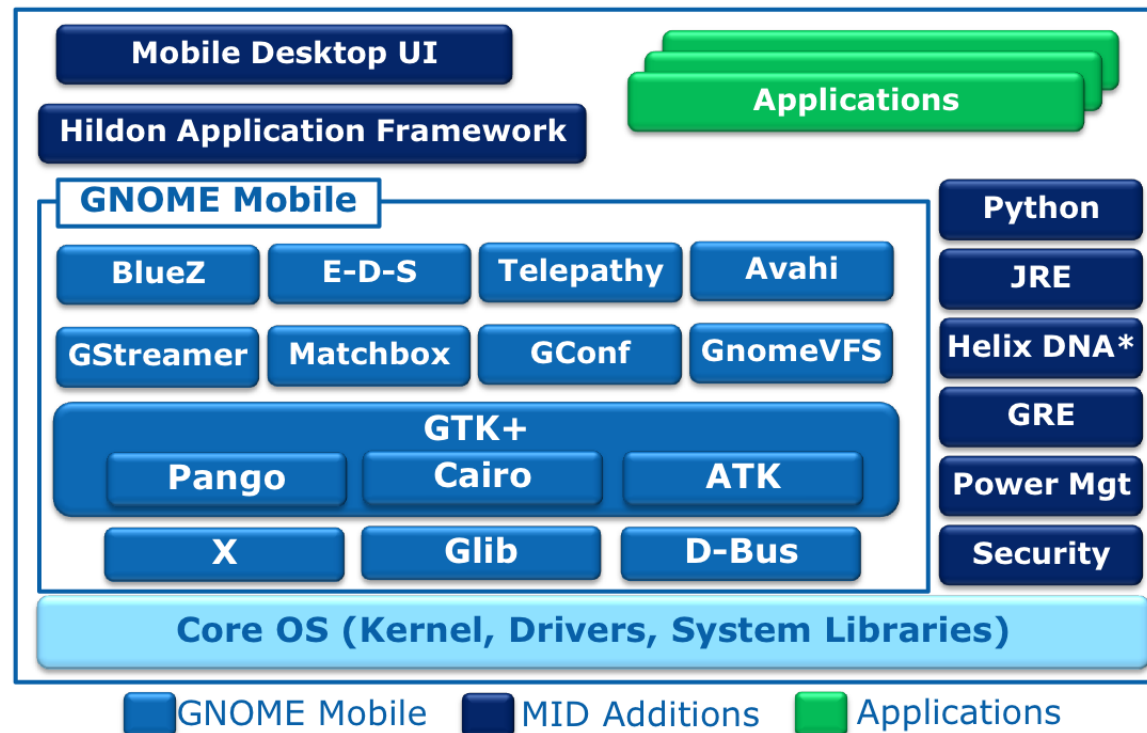 - 03/17/2009: Moblin v2 Alpha2
  - 05/20/2009: Moblin v2 Beta for Netbook, Nettop
- Apr 2009: Linux Foundation to Host Moblin Project.
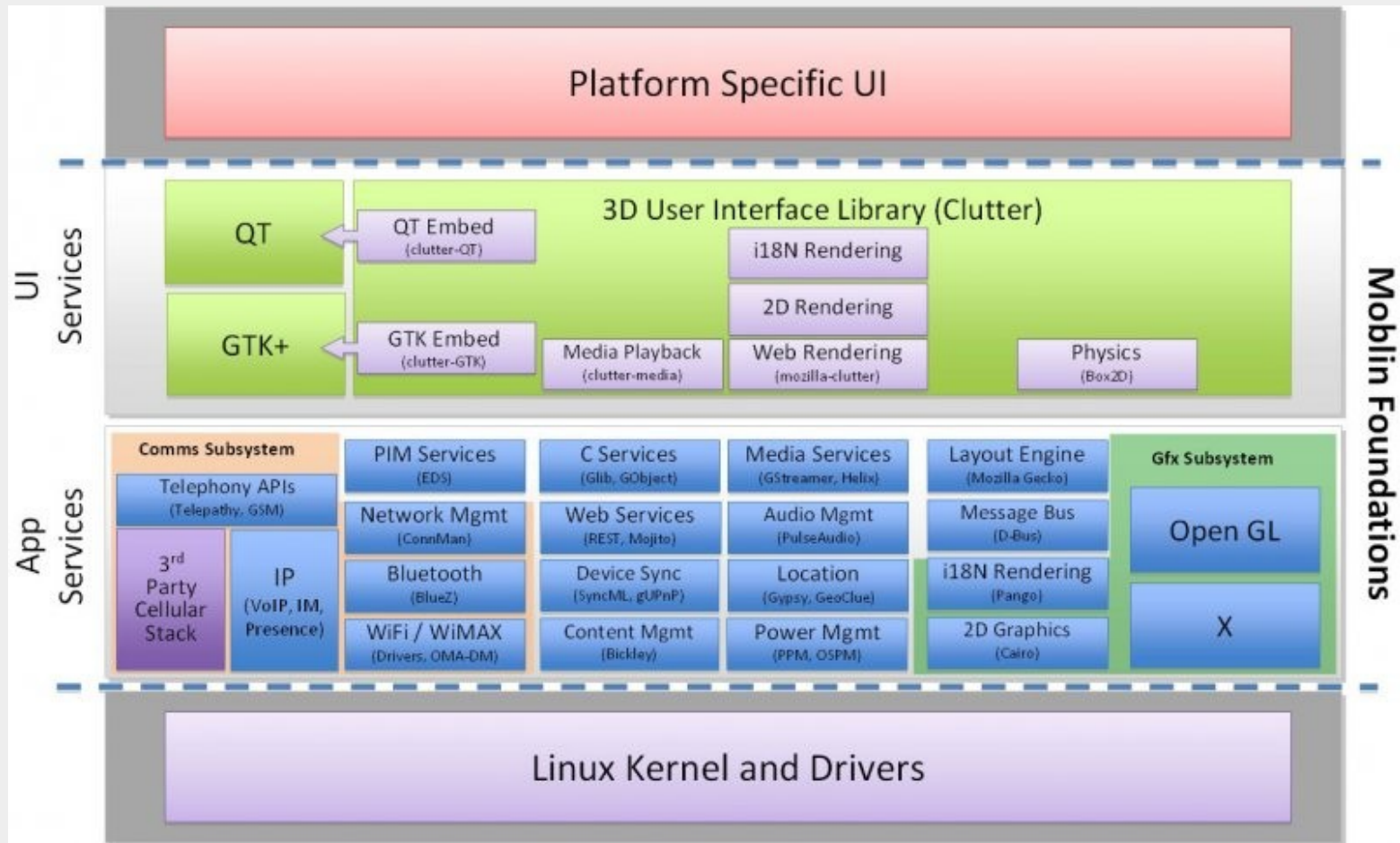
Moblin v1(an old story)

Moblin v1(an old story)

- kernel 2.6.24
  - Applied Poulsbo(US15W) patches
- X server 1.4
- Mesa 7.0.3
- Python 2.4
- GCC 4.2.3
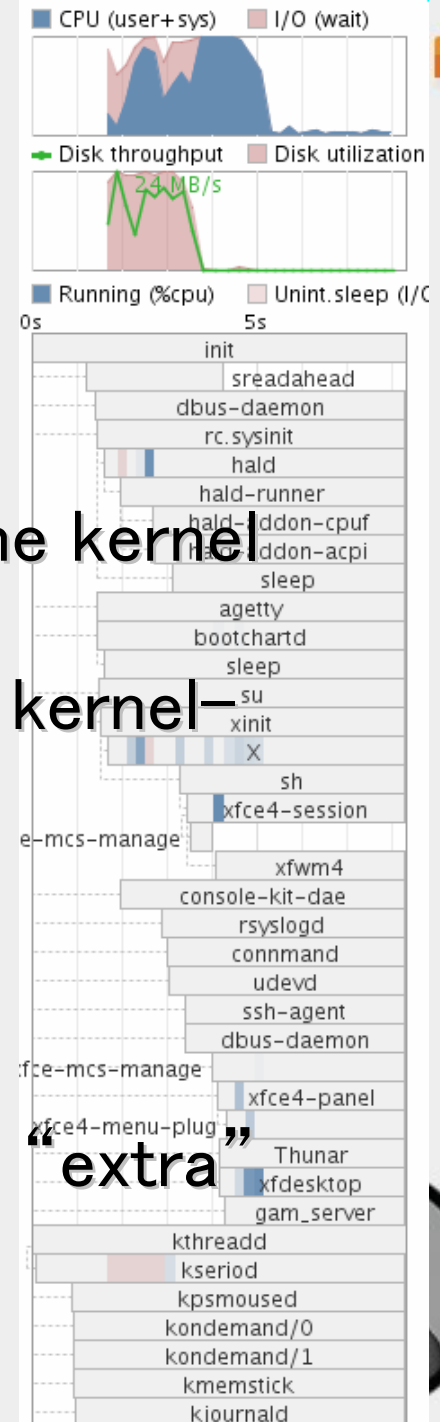- Based on
  Ubuntu 8.04

Moblin v2(current)

Moblin v2(current)

- kernel 2.6.29
  - CONFIG_FASTBOOT=y
- X server 1.6
- Mesa 7.3
- Clutter 1.0
- Python 2.6
- GCC 4.3.3
- RPM 4.6

Fast boot

- sreadahead optimized for SSDs
- kernel
  - All system components built into the kernel image
  - kernel-netbook-~.moblin2.i586.rpm, kernel-menlow... etc
  - Asynchronous initialization
- No initrd, No Boot Splash
- Sysvinit, not upstart
- xorg-x11-drv-intel is trimmed various "extra" delays

Other services

- Bugzilla: bugzilla.moblin.org
- Git: git.moblin.org
- Mailing List: moblin.org/community/mailing-lists
  – dev@lists.moblin.org
- IRC: #moblin on irc.freenode.org

![moblin.org]

Pickups from LFCS

Session 1st day

- Moblin 2: State of the Union
- Imad Sousou
  - Director of Open Source Technology Center, SSG, Intel Corporation
- http://video.linuxfoundation.org/video/1382
- Introduction of Moblin

Session 2nd day

- Introduction: Dirk Hohndel
- Moblin Overview: Paul Cooper
- Porting to Moblin 2.0 and Beyond: Rob Bradford
- Connection Manager: Marcel Holtmann
- Clutter Tutorial: Emmanuele Bassi
- Moblin SDK: Bob Spencer
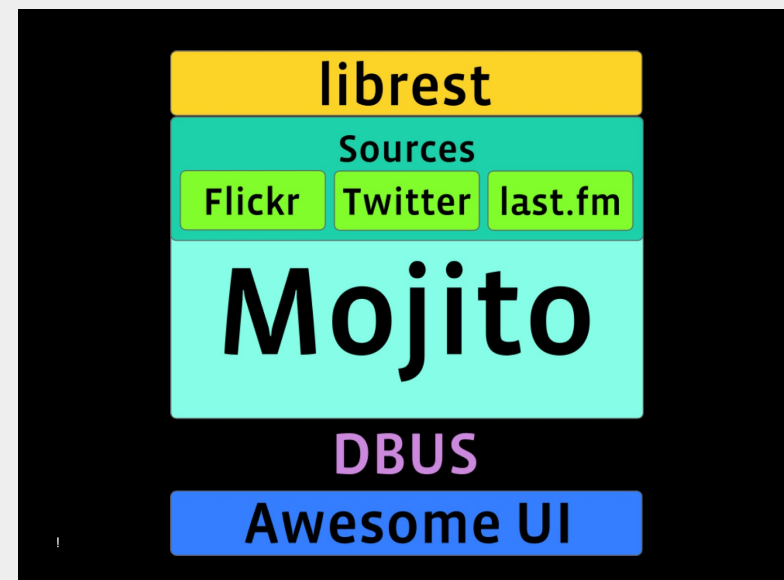- Cooking with Moblin Core Technologies: Rob Bradford

F2F

librest, mojito

- Integrate the social networking service and GUI apps

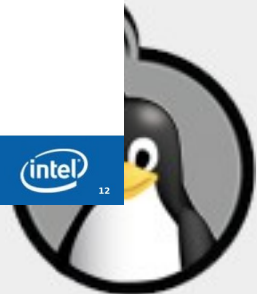- Mojito can fetch from Flicker, Last.fm, and Twitter.
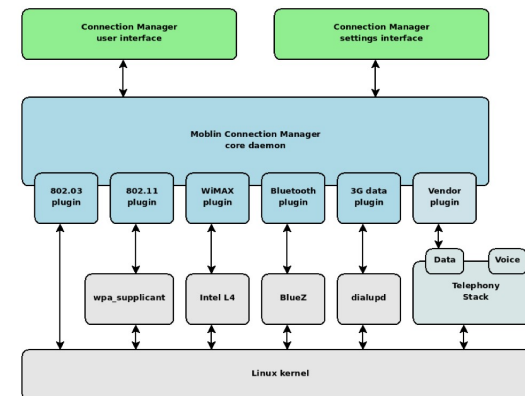
Connection Manager

- New network manager for mobile systems

- Pointed out existing Network Manager is...
  - Not easy to extend
  - Patched by Linux distributions
  - too much GNOME like source code

- Starting from scratch as one of the Moblin projects

- Expandable via plugins

- Ready for embedded usage
  - Fast network connection
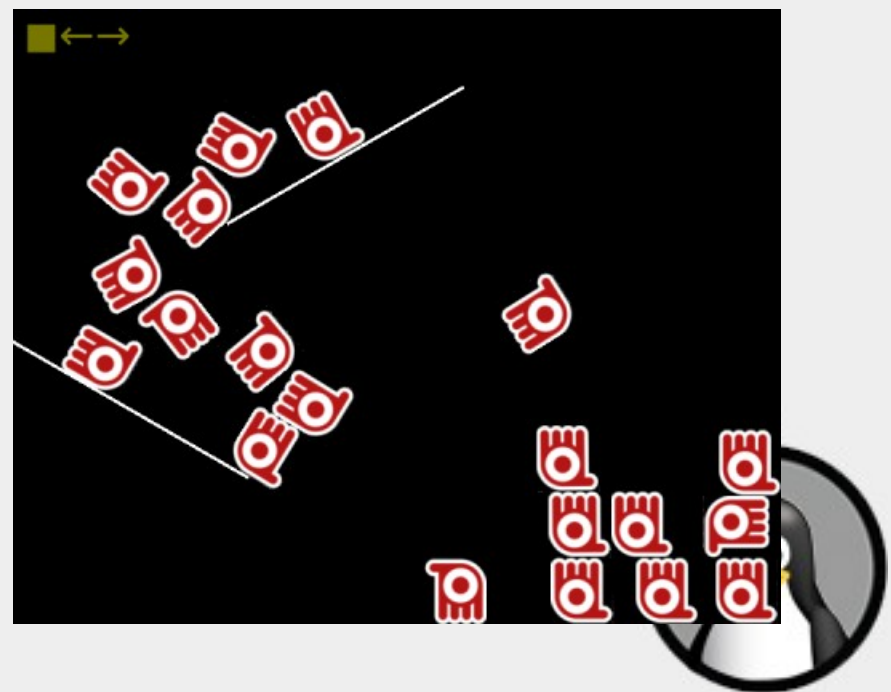 - Internal DNS

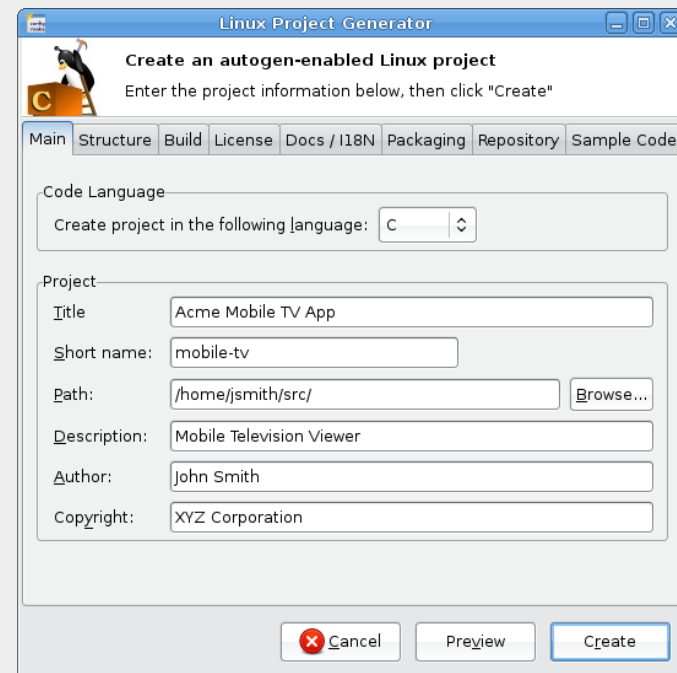**Support multiple technologies**

Clutter

- 3D User Interface Library

- Integration with other libraries

  - clutter-qt, clutter-gtk, clutter-media, mozilla-clutter, clutter-box2d(physics)

- Fast and visually rich interfaces, 3D effects and animations

- Developed in C with bindings for Python, Perl, C#

Moblin SDK

- Development Environment
  - KVM, VMWare, FS images
- Tools
  - Moblin Image Creator 2
  - Linux Project Generator(projgen)
- Documentation
  - Developer Guides
  - API Refereneces

In the future...

In the future...

- Moblin v2 GA for Netbook, Nettop('09/Q3)
- Moblin v2 for MID('10/Q1)

- Moblin v2 for the next generation of Netbook, Nettop...?

- Next version of Moblin...?

Articles in Japan

Articles in Japan

moblin.org

- 日経Linux 2008年9月号 (Moblin 1.0)
  - AtomでモバイルLinuxに挑戦

- 日経Linux 2009年7月号より連載予定
  - Moblinの概要、イメージの作り方等

Articles in Japan

- ## ITPro LFCS現地リポート
  - Microsoftも Sunも実はみんな仲良し？
  - **Moblin普及にかけるIntelの"本気度"を見た**
  - 地球にやさしい「グリーンLinux」は実地検証のフェーズに移行
  - Linuxの明日は晴れか曇りか？「Linux天気予報」セッションが開催

Web sites: moblin.org / moblin.jp

Q&A

Thank you!